

**REMARKS/ARGUMENTS****Discussion Of Amendment And February 25, 2004 Telephone Interview With Examiner**

Upon entry of the instant amendment, claims 30, 33, 44 and 55 will be amended, whereby claims 30-60 will remain pending. Claims 30, 44 and 55 are independent claims.

Applicants note that the claims are amended herein in accordance with discussions conducted during a February 25, 2004 telephone interview with the examiner wherein the Final Office Action was discussed. In particular, it was noted that the claims were amended in accordance an October 7, 2003 personal interview with the examiner's supervisor wherein the claim language was discussed, and was indicated to overcome the 35 U.S.C. 112, first and second paragraph rejections. It was noted that the Examiner Interview Summary Record indicates that, "claim language was proposed to overcome the 112 1<sup>st</sup> & 2<sup>nd</sup> paragraph rejections." The examiner indicated that he would be cooperative in reaching mutually acceptable claim language upon further argument by Applicants.

Regarding rejections based upon prior art, the examiner expressed hesitancy regarding preventive claims and possible inherency. However, the examiner appeared to be receptive to claims that include a more positive treatment of bacterial infection. For example, the Examiner indicated that he may favorably consider claims, upon further search and consideration, directed to methods for treatment of bacterial infection in chickens having bacterial infection.....

With regard to the above, the examiner appeared to be receptive at least to the argument that the prior art does not appreciate that chickens having bacterial infection could be treated in

the manner recited in Applicants' claims. For example, the prior art is silent with respect to any ability of xylanase to treat bacterial infections in chickens.

Applicants are amending the claims herein in an attempt to advance prosecution of the application to issue. The amendments made herein are being made without prejudice or disclaimer of the subject matter recited therein. In this regard, Applicants preserve the right to present the subject matter included in the claims prior to the instant amendment in one or more continuation and/or divisional applications, and to present further arguments relating to this patentability.

Reconsideration and withdrawal of the rejections of record are respectfully requested.

#### **Claim of Foreign Priority**

Applicants express appreciation for the acknowledgement of receipt of the certified copy of the priority application.

#### **Return Of Initialed Form PTO-1449**

Applicants express appreciation for the inclusion with the Final Office Action of an initialed copy of the Form PTO-1449 submitted with the Second Supplemental Information Disclosure Statement whereby the examiner's consideration of this disclosure statement is of record.

**Response To Restriction Requirement**

Applicants once again confirm the election of Group I, claims 30-43, with traverse.

Applicants further note that Group II, claims 44-60 stand withdrawn from further consideration by the Examiner as being drawn to a non-elected invention.

In response to the Restriction Requirement, Applicants respectfully submit that the requirement is not appropriate, because as previously argued there is not a serious burden to examine each of the pending claims especially when similar subject matter was previously examined in the instant application. In any event, Applicants are permitting the non-elected claims to remain pending possible rejoinder upon allowance of the elected claims.

In view of the foregoing, it is respectfully requested that the examiner seriously reconsider the requirement for restriction, and withdraw the same so as to give an examination on the merits on all of the claims pending in this application or at least to rejoin the non-elected claims upon allowance of the elected claims..

**Response To Rejections Under 35 U.S.C. 112, First And Second Paragraphs**

Claims 30-43 are rejected under 35 U.S.C. 112, first and second paragraphs, as failing to comply with the written description requirement and as being indefinite.

In response and as noted above, during the above-noted telephone interview, the examiner indicated that he would reconsider these rejections upon presentation of another response and would be of assistance in arriving at mutually acceptable language in the event that the examiner deems that the rejections should be maintained. However, Applicants respectfully submit that the

claims clearly denote Applicants' invention so that one having ordinary skill in the art can readily understand the metes and bounds of the claims, including the fact that xylanase is present in the claims.

In particular, claim 30 explicitly recites that the diet includes xylanase with the xylanase being present in an amount effective for treatment of the bacterial infection. The characteristics of the xylanase are recited in claim 30 by reciting that the xylanase is present in an amount effective in the absence of an antimicrobial drug or in the presence of an antimicrobial drug at a concentration that in the absence of the xylanase is not effective for treatment of bacterial infection in chickens. Moreover, claim 30 recites that the diet does not contain an antimicrobial drug or contains an antimicrobial drug at a concentration that is not effective in the absence of the xylanase for treatment of bacterial infection in chickens. Thus, the recitation of "in the absence of xylanase" relates to the amount of antimicrobial drug in the diet. One having ordinary skill in the art would readily understand that xylanase is present in the method of treatment recited in claim 30 and the claims that depend therefrom.

Accordingly, these grounds of rejection should be withdrawn.

#### **Response To Rejections Based Upon Prior Art**

Applicants note that the following rejections are set forth in the Final Office Action:

Claims 30-43 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2,287,867 (hereinafter "GB '867"), Bedford et al., U.S. Patent No. 5,612,055 (hereinafter "Bedford '055"), or Bedford et al., U.S. Patent No. 5,624,678 (hereinafter "Bedford '678")

Claims 30-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Clarkson et al., U.S. Patent No. 5,902,581 (hereinafter "Clarkson") or Hansen et al., U.S. Patent No. 5,817,500 (hereinafter "Hansen").

Claims 30-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '867, Bedford '055, Bedford '678, Clarkson or Hansen.

The rejections assert that Applicants have submitted 20 articles to get the point across that antibacterials are many times used in raising cattle. The rejections assert that while this is an interesting point it does not mean that the references did use antibacterials. The rejections assert that there is absolutely nothing in the references to even suggest that they did. Basically, the rejections assert that unless Applicants can prove that the references did use antibacterials the arguments are without merit.

In response, Applicants respectfully submit that the rejections are seeking to have Applicants prove that antibacterials were used in each of the five documents utilized in the rejections. However, the fact is that Applicants have provided ample evidence in their previous responses that antibacterials were routinely included in chicken feed. For example, reference is once again made to Fenster, "Feed Additives: A Global Market Study", Animal Pharm Reports, particularly Tables 2.75 and 2.76 and page 79. This is just one example of the many documents which consistently teach that poultry feeds used by farmers at that time invariably included one or more antibacterial components in order to defend their flocks against infections caused by *Salmonella*, *Campylobacter*, and *Clostridium*.

The majority of the cited prior art is not concerned with the treatment of diseases of any type but rather the use of enzyme additives for boosting feed digestion. Thus, it is not surprising that these documents do not mention the presence of antibacterials as antibacterials have nothing to do with their inventions. Patents ordinarily do not disclose all aspects of environments to which they pertain, but usually are directed to matters that are directly related to their invention.

Bedford '678 is related to treating or preventing coccidiosis in an animal by administering a carbohydrase which may be a component of the animal feed. Bedford '678 discloses that coccidiosis is routinely controlled by the use of preventative anticoccidial drug programs which include the use of agents such as salinomycin, monensin and narasin. These agents are antimicrobials used in the treatment of coccidial infection. Bedford '678 discloses such antimicrobials as they relate to the treatment of coccidial infection disclosed therein:

Applicants respectfully submit that the prior art of record does not teach methods of treatment of bacterial infection in chickens using xylanase, a cellulase or  $\beta$ -glucanase. There is no teaching or suggestion in the prior art that these materials have antimicrobial activity and can be utilized in the treatment of bacterial infections in chickens caused by bacteria selected from the group consisting of *Salmonella*, *Campylobacter*, *Clostridium perfringens*, and mixtures thereof.

The documents utilized in the rejections are silent with respect to treating bacterial infections in chickens. In this regard, as previously noted by Applicants, antibiotics are utilized in the diets of chickens to treat bacterial infections caused by bacteria. There has been a long felt need to reduce or eliminate antibiotics from the diets of chickens when treating bacterial infections; however, until Applicants' invention, the art has not been able to treat bacterial

infections in chickens without using doses of antibiotics at a concentration that are effective for treatment of bacterial infection. The question is not whether the documents utilized in the rejections are silent with respect to the use of antibiotics, especially when the documents are not directed to the treatment of antibacterial infections. As previously noted by Applicants, one having ordinary skill in the art would add therapeutic or prophylactic amounts of antimicrobial drugs to the diet of chickens for treatment and/or prophylaxis of antibacterial infections in chickens fed the feed of disclosed in the documents utilized in the rejections. For example, the prior art does not recognize the ability of xylanase to treat bacterial infections in chickens, and would utilize conventional techniques including antimicrobial drugs to treat bacterial infections in chickens.

For the sake of brevity, Applicants are not repeating each of the arguments as previously presented. However, Applicants incorporate their arguments as set forth in their response filed November 18, 2003.

Accordingly, the anticipation rejections are without appropriate basis, and should be withdrawn.

Moreover, regarding the obviousness rejection, Applicants once again note that the rejection is without sufficient basis. In this regard, it is noted that the rejection asserts that it would have been obvious to use the specific amounts claimed since it is well within the purview of the skilled artisan to optimize the desired results through routine experimentation. However, the rejection does not point to what amounts are being referenced, what desired results are being optimized, and what experimentation is being utilized.

Still further, Applicants note that a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). In the instant situation, the rejection does not establish any variable as a result-effective variable, and does not indicate what experimentation is considered to be routine for this variable.

Thus, if this ground of rejection is maintained, the Examiner is once again respectfully requested to set forth the basis of the rejection. Of course, if the basis for the rejection is stated, it would be expected that the finality of the rejection be withdrawn. In this regard, Applicants have previously requested that the basis for this ground of rejection be clarified for the reasons set forth herein.

In view of the above, the rejections of record should be withdrawn.

### CONCLUSION

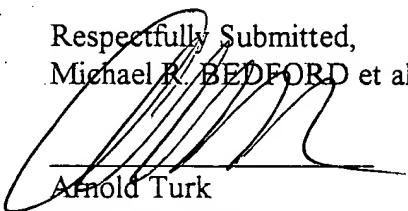
For the reasons advanced above, Applicants respectfully submit that all pending claims patentably define Applicants' invention.

Allowance of the application with an early mailing date of the Notices of Allowance and Allowability is therefore respectfully requested.

P23446.A07

Should the Examiner have any further comments or questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,  
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